(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 3 June 2004 (03.06.2004)

PCT

(10) International Publication Number . WO 2004/045634 A1

(51) International Patent Classification7:

A61K 38/00

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(21) International Application Number:

PCT/GB2003/005049

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(81) Designated States (national): AE, AG, AL, AM, AT, AU,

AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR,

(22) International Filing Date:

20 November 2003 (20.11.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/427,702

20 November 2002 (20.11.2002) US

CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COMPOSITION AND METHOD FOR TREATING INFLAMMATORY DISEASES USING PROTEASE INHIBITORS

(57) Abstract: Compositions containing a protease inhibitor and methods of use and production are described. The compositions contain an effective amount of a protease inhibitor in a carrier or diluent and are used for the treatment of inflammatory or hyperproliferic mucocutaneous disorders. The carrier or diluent is preferably a gelling agent, and the composition is a topical gel formulation containing alpha 1-antitrypsin in an aqueous liquid or viscous gel formulation.